



For Office Use:
 Receipt # _____
 Date Received _____
 File No. _____
 Sign Issued: Yes No N/A

Application for Development

1. TYPE OF APPLICATION

FEE

- Official Community Plan Bylaw Amendment* \$ 1,150.00
- Zoning Bylaw Amendment* # \$ 800.00
- Official Community Plan / Zoning Bylaw Amendment combined* # \$ 1,200.00
- Temporary Use Permit* \$ 500.00
- Temporary Use Permit Renewal \$ 350.00
- Development Permit # \$ 165.00
- Development Variance Permit \$ 165.00

* Sign is required for this application type.

Sign provided by the PRRD and posted pursuant to Section 6 of Bylaw No. 2449, 2021, attached.

Contaminated Site Declaration Form required for this application type.

- Exclusion from the Agricultural Land Reserve \$ 1,500.00
(Applicant responsible for additional costs associated with the advertisements, signage, and facility rental, if applicable)

2. PLEASE PRINT

Property Owner's Name Deanna Steward, John Steward, Kevin Steward, Jacqueline Henderson, Katelan McBrearty	Authorized Agent of Owner (if applicable) n/a
Address of Owner [REDACTED]	Address of Agent
City/Town/Village: [REDACTED]	City/Town/Village:
Postal Code: [REDACTED]	Postal Code:
Telephone Number: [REDACTED]	Telephone Number:
E-mail: [REDACTED]	E-mail:

Notice of collection of personal information:

Personal information on this form is collected for the purpose of processing this application. The personal information is collected under the authority of the *Local Government Act* and the bylaws of the PRRD. Documentation/Information submitted in support of this application can be made available for public inspection pursuant to the *Freedom of Information and Protection of Privacy Act*.

3. PROPERTY DESCRIPTION

Full legal description and PID of each property under application	Area of each lot
DL 1889 PRD Except Plan PGP 17392	4.57 ha. <small>ha./acres</small>
	<small>ha./acres</small>
	<small>ha./acres</small>
	TOTAL AREA 4.57 ha. <small>ha./acres</small>

4. Civic Address or location of property: 5889 E Centennial Road,
Moberly Lake, BC VOC 1X0

5. PARTICULARS OF PROPOSED AMENDMENT

Please check the box(es) that apply to your application type:

Official Community Plan (OCP) Bylaw amendment:
 Existing OCP designation: _____
 Proposed OCP designation: _____
 Text amendment: _____

Zoning Bylaw amendment:
 Existing zone: _____ R4
 Proposed zone: _____ R3
 Text amendment: _____

Development Variance Permit – describe proposed variance request:

Temporary Use Permit – describe proposed use:

Development Permit: Bylaw No. _____ Section No. _____

6. Describe the existing use and buildings on the subject property:

The property is vacant land and is currently not being used.

7. Describe the existing land use and buildings on all lots adjacent to and surrounding the subject property:

- (a) North Crown land
- (b) East 20 meter road right of way, then a private vacant lot (Lot A PGP DL485 PRD)
- (c) South Moberly Lake
- (d) West Private lot and mobile home - 5897 E Centennial Road, Moberly Lake, BC

8. Describe your proposal. Attach a separate sheet if necessary:

The proposal is to subdivide the parcel into 4 separate lots. The total area of the parcel is 4.57 hectares and we would like to subdivide to approximately 4 equal lots as per attached subdivision and sewer assessment. This will entail rezoning the property from R4 (>1.8 ha) to R3 (>0.9 ha).

9. Reasons and comments in support of the application. Attach a separate sheet if necessary:

As part of estate planning we would like to distribute the property for family members on title and / or sell to third parties.

10. Describe the proposed and/or existing means of sewage disposal for the property:

There is no sewage system on the property at present. We hired L&M Engineering (Prince George) to provide a thorough Sewage Suitability Assessment (as attached). Each of the 4 proposed lots is capable of supporting a Type 1 Sewage System.

11. Describe the proposed and/or existing means of water supply for the property:

Purchasers / owners will determine their means of water supply (eg. wells, hauled water, etc.). Areas for wells have been outlined in the Sewage Suitability Assessment as attached.

THE FOLLOWING INFORMATION IS REQUIRED DEPENDING ON THE PROPOSAL/APPLICATION:

12. Proof of ownership of the subject property or properties. (For example: Certificate of State of Title, BC Land Title Office Property Title Search or recent Property Tax Notice.) *Certificate of Title Attached.*

13. A Sketch Plan of the subject property or properties, showing the following:

- (a) the legal boundaries and dimensions of the subject property; *Map Attached.*
- (b) boundaries, dimensions and area of any proposed lots (if subdivision is being proposed); *Assessment Attached*
- (c) the location and size of existing buildings and structures on the subject property, with distances to property lines; *No existing structures.*
- (d) the location and size of any proposed buildings, structures, or additions thereto, with distances to property lines; *Assessment Attached.*
- (e) the location of any existing sewage disposal systems; *No existing sewage systems.*
- (f) the location of any existing or proposed water source. *Assessment Attached.*

ADDITIONAL OR MORE DETAILED INFORMATION MAY BE REQUESTED BY THE PEACE RIVER REGIONAL DISTRICT FOLLOWING REVIEW OF YOUR APPLICATION.

If it is necessary for the property boundaries and the location of buildings and structures to be more accurately defined, a survey plan prepared by a British Columbia Land Surveyor may be required.

15. I / We the undersigned hereby declare that the information provided in this application is complete and
[redacted] wledge, a true statement of the facts related to this application.

[redacted]
Signature of Owner

Nov 9, 2024
Nov 9, 2024

Date signed

[redacted]
Signature of Owner

Nov 9, 2024

Date signed

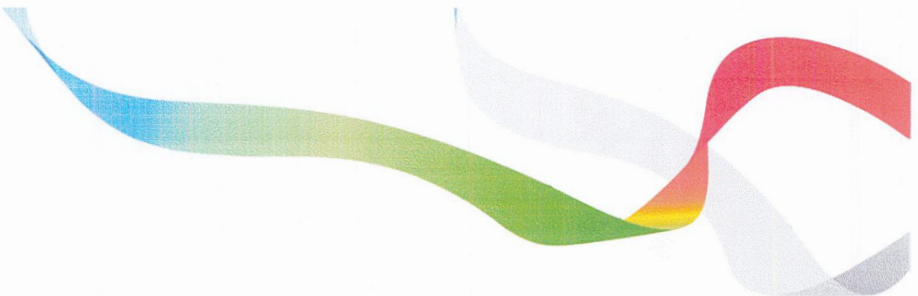
[redacted]
Signature of Owner

Nov 9, 2024

16. If you have an agent act on your behalf in submission of this application, the following
authorization **MUST** be signed by **ALL** property owners.

Nov 9, 2024

I / We _____ and _____ hereby authorize	
(name of landowner) (name of landowner)	
_____ to act on my/our behalf regarding this application.	
n/a	
(name of agent)	
Signature of Owner:	Date:
Signature of Owner:	Date:



CONTAMINATED SITE DECLARATION FORM

Deanna Steward, J. Kevin Steward, Kaitlan McBrearty,
I, Kevin Steward, Jacqueline Henderson, hereby acknowledge that the
Environmental Management Act, 2003, as amended, is effective as of February 1, 2021.

Legal Description(s):

DL 1889 PRD Except Plan PGP 17392

Please check only one:

- I have read [Schedule 2](#) and based on my personal knowledge of the property in question, I do not believe that it is or has been used for any of the industrial or commercial purposes and activities specified in [Schedule 2](#) of the regulations. Accordingly, I elect not to complete and submit a 'site disclosure statement', as outlined in Section 40.(1) of the Act.
- I have read [Schedule 2](#) and one or more of the identified purposes or activities is or has occurred on the land(s) legally described above.
*Please contact staff to submit a "site disclosure statement" at planning@prrd.bc.ca

I further acknowledge that this declaration does not remove any liability, which may otherwise be applicable under the legislation.

[Redacted signature]

Nov 9, 2024
Nov 9, 2024
dd mm yyyy

[Redacted signature]

Nov 9, 2024
dd mm yyyy

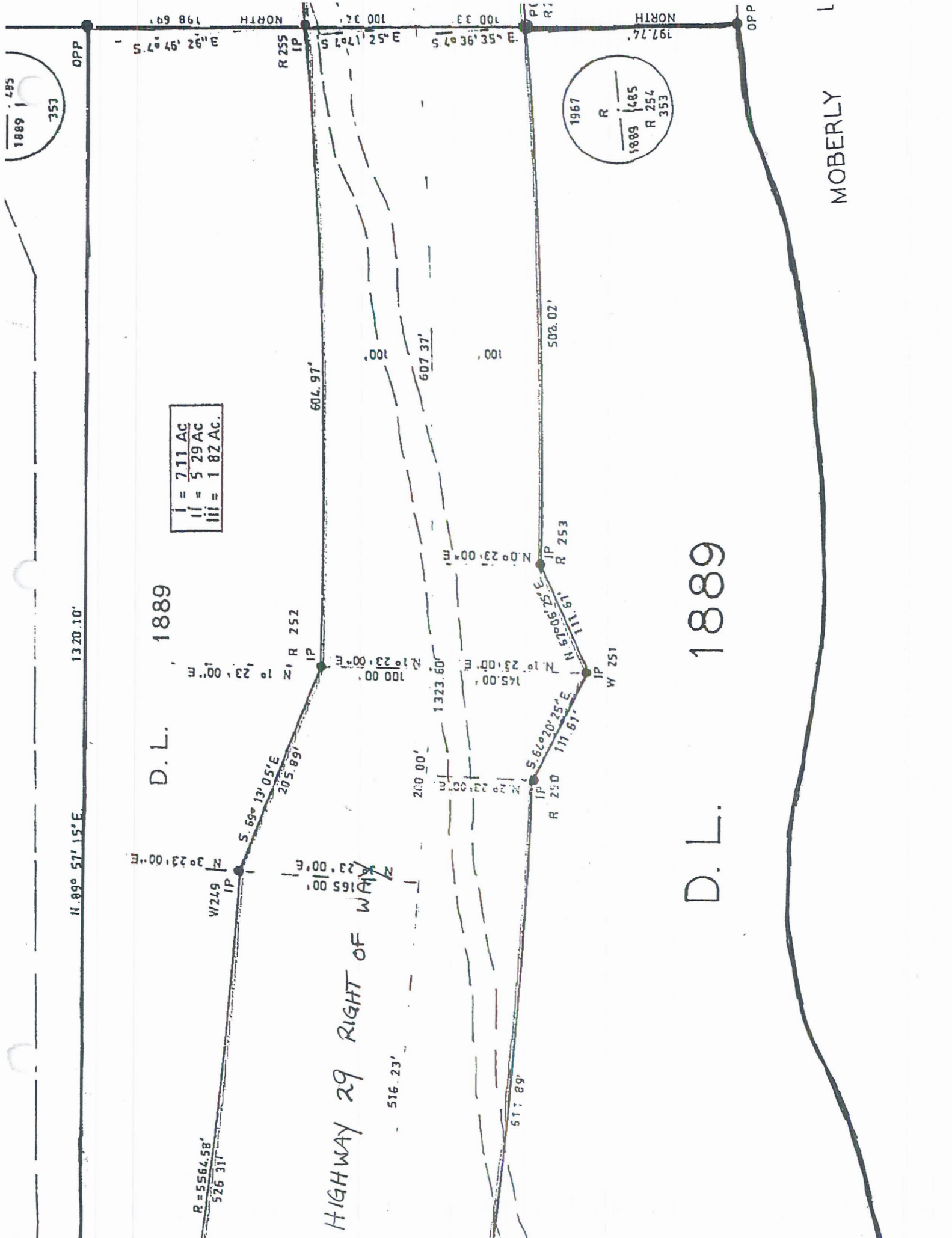
Owner/Agent

[Redacted signature]

Nov 9, 2024
Nov 9, 2024

visit the ministry's Identification of Contaminated Sites webpage or e-mail

SiteID@gov.bc.ca



1889 485
353

1967
R
1889 485
R 254
353

I = 7.11 AC
II = 5.29 AC
III = 1.82 AC.

D.L. 1889

D.L. 1889

MOBERLY

HIGHWAY 29 RIGHT OF WAY

N. 89° 57' 15" E 1320.10' OPP
 R = 5564.58' 526.31' IP
 W 279 IP
 N 30° 23' 00" E
 S 59° 13' 05" E 205.89' IP
 R 252 IP
 N 10° 23' 00" E
 604.97' IP
 R 255
 100' 607.37' 100'
 200.00' 1323.60' 145.00' N 10° 23' 00" E
 516.23' 517.89'
 5.62° 20' 25" E 111.67' IP
 R 250 IP
 W 251 IP
 N 65° 05' 25" E 111.67' IP
 R 253 IP
 N 0° 23' 00" E
 508.02' IP
 R 254
 197.74' NORTH
 100.33' 100.33' 198.69' NORTH
 3.52 1701.5 3.52 193.07 5



July 16th, 2024

PROPOSED 4 LOT SUBDIVISION

SEWAGE SUITABILITY ASSESSMENT

**5889 EAST CENTENNIAL ROAD, MOBERLY LAKE, BC
DISTRICT LOT 1889 PEACE RIVER LAND DISTRICT EXCEPT PLAN PGP17392
PID: 005-606-331**

**Client: Deanna Steward
L&M Project No.: 1913-01**

L&M ENGINEERING LIMITED

1210 Fourth Avenue, Prince George, BC V2L 3J4
Phone: (250) 562-1977

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Appendix A: Onsite Sewage Evaluation Data

Appendix B: Sewage Suitability Assessment Drawings

1.0 INTRODUCTION

L&M Engineering Limited has been engaged by Deanna Steward to complete an onsite sewerage system suitability assessment for the proposed 4 lot subdivision created from the subject property (PID: 005-606-331) located on Moberly Lake.

The subject property, 5889 E. Centennial Road, is approximately 4.57 ha. The property is zoned R4: Residential 4 Zone (> 1.8 ha) in the *Peace River Regional District Zoning Bylaw No. 1343*. The proposed subdivision will create four new lots, resulting in a rezoning to R3: Residential 3 Zone (> 0.9 ha), as followed by the property owner's plan.

2.0 BACKGROUND REPORTS AND DATA

L&M Engineering has reviewed and conformed to the following guidelines and information in relation of the proposed suitability assessment:

- PRRD Zoning Bylaw No. 1343, 2001;
- Northern Health Guidelines for Subdivision;
- BC Sewerage System Regulation (SSR); and
- Sewerage System Standard Practice Manual Version 3 (2014).

3.0 EXISTING SITE CONDITIONS

3.1. TOPOGRAPHY

The subject property is bisected by Highway 29. On the South side, the proposed Lot 1 and west end of Lot 2 are relatively flat, gaining a slight slope when approaching the road. The rest of proposed Lot 2, as well as Lot 3 and Lot 4, have more varying slopes between 10-15% towards the lake (N to S). On the North side of the highway, Lots 1 to 4 all have more aggressive slopes varying between 15-20%, again sloping downwards in the lake's direction.

3.2. SUBSURFACE SOILS

Soil test pitting on the subject property was conducted on June 18th, 2024 by L&M Engineering to establish onsite sewage suitability and recommendations for the proposed development. On the South side, the soils on Lots 1, 2, & 4 consisted primarily of loamy sand or loam, while on Lot 3 the soil was found to be clay till. On the North side of the highway, the soils consisted primarily of structured clay with trace amounts of silt. None of the test pits revealed an indication of groundwater presence. Please refer to Appendix A for the full soil assessment.

3.3. DEVELOPMENT ACCESS

Proposed Lots 1 to 3 will have direct frontage access to E. Centennial Rd, and proposed Lot 4 to Highway 29. These accesses will be along the north boundary of the development, on the South side of the highway.

3.4. EXISTING SERVICING

There is no existing sewer system available to service the proposed lots. The proposed new lots will require onsite sewage systems to support the subdivision development.

4.0 ONSITE SEWAGE SERVICING

Northern Health’s Guidelines for Subdivision indicates that a minimum of two observation holes are required in each of the proposed discharge areas (pg. 14). L&M Engineering Limited completed a minimum of four (4) test pits per proposed lot to support the proposed subdivision development.

4.1. SOIL PROFILE AND CHARACTERISTICS

A total of 14 test pits were completed for the proposed subdivision development. Table 1 below provides a summary of the typical soil structure. Refer to Appendix A for the full test pit log.

Test Pit Number	Depth (m)	Soil Type	Description	Groundwater Conditions
1	0 – 0.25m	Organic soil	Dry	Plenty Roots (5-30mm)
	0.25 – 0.5m	Fine Silty Sand	Angular / Blocky / Moderate / Dry	None
	0.5 – 0.65m	Silty Sand with Gravel	Angular / Blocky / Moderate / Dry	None
	0.65 – 1.8m	Sandy Silt Trace Clay	Structureless / Weak / Dry	None
2	0 – 0.2m	Organic soil	Dry	Plenty Roots (5-30mm)
	0.2 – 0.5m	Silty Sand	Platy / Weak / Dry	Some Roots (5 – 10mm)
	0.5 – 0.7m	Gravelly Sand	Granular / Weak / Dry	None

	0.7 – 1.1m	Sandy Loam	Structureless / Strong / Friable	None
	1.1 – 1.7m	Sandy Loam with Gravel	Granular / Weak / Dry	None
3	0 – 0.15m	Organic soil	Dry	Some Roots (5 – 20mm)
	0.15 – 0.7m	Sand with Coarse Gravel	Structured / Moderate / Dry	None
	0.7 – 1.0m	Sand with Gravel	Structured / Moderate / Dry	None
	1.0 – 1.8m	Clayey Sand	Structured / Moderate / Dry	None
5	0 – 0.2m	Organic soil	Dry	Plenty Roots (5-40mm)
	0.2 – 0.8m	Sand Trace Silt with Gravel	Platy / Strong / Dry / Firm	None
	0.8 – 1.6m	Sandy Silt with Gravel	Platy / Moderate / Dry / Firm	None
7	0 – 0.3m	Organic soil	Moist	Some Roots (5 – 20mm)
	0.3 – 2.0m	Sandy Silt Loam	Granular / Moderate / Dry / Friable	None
8	0 – 0.25m	Organic soil	Dry	Plenty Roots (5-30mm)
	0.25 – 0.6m	Sandy Loam with Gravel	Granular / Weak / Moist	None
	0.6 – 1.1m	Fine Silty Sand	Granular / Weak / Dry	None
	1.1 – 1.3m	Sand with Gravel	Granular / Moderate / Dry	None
	1.3 – 1.9m	Fine Silty Sand	Granular / Weak / Dry	None
9	0 – 0.3m	Organic soil	Dry	Some Roots (5 – 20mm)
	0.3 – 0.9m	Clay Till Trace Sand	Granular / Weak / Dry	None
	0.9 – 1.6m	Clay Till	Platy / Moderate / Dry	None
10	0 – 0.2m	Organic Soil	Dry	Some Roots (5 – 20mm)
	0.2 – 0.7m	Clay Till	Blocky / Moderate / Dry / Firm	None

4.2. SOIL PERMEABILITY

Field-saturated hydraulic conductivity testing was performed using a permeameter and 7.5cm diameter Edelman auger. Auger holes were drilled at the bottom or a bench partway down the test pit and permeameter tests were conducted to determine the hydraulic capacity of the native soils. The field saturated hydraulic conductivity testing is summarized in Table 2 below. Refer to Appendix A for detailed permeameter results.

Permeameter Test Number	Corresponding Test Pit	Depth of Auger Hole (m)	Stable Rate of Fall (mm/min)	Soil Factor	KFS Value (mm/day)
1	TP 1 @ grade	0.50	5.3	56.4	296
2	TP 2 @ bench	1.00	17.0	56.4	959
3	TP 3 @ bench	1.20	5.4	56.4	305
5	TP 5 @ bench	1.10	6.0	56.4	339
7	TP 7 @ bench	0.80	9.5	56.4	536
8	TP 8 @ grade	0.50	6.0	56.4	339
9	TP 9 @ bench	0.60	1.9	56.4	106

4.3. DESIGN FLOWS

The design basis for onsite septic suitability to support subdivision is 1,600 L/d which is the estimated flow for a 4-bedroom dwelling as indicated in the Northern Health Subdivision Guidelines and the Sewage System Standard Practice Manual V.3 (SPM.V3).

4.4. SEWAGE TREATMENT TYPE

For the purposes of subdivision approval, the proposed subdivision must have adequate site conditions to provide a sewage system and reserve area for basic sewage treatment and disposal systems.

The classification of a sewage treatment system is defined by the type of effluent achieved after treatment. The effluent types are established by the regulatory body. The required treatment type for a system is primarily based on site constraints and disposal methods.

The Ministry of Health classifies effluent quality from treatment as Type 1, Type 2, and Type 3. The different treatment classes are defined as follows:

- **Type 1:** Septic tank treatment resulting in an effluent quality of 150-300 mg/L BOD5 and 50-80 mg/L TSS with effluent filter;
- **Type 2:** Septic tank and activated sludge (mechanical) treatment resulting in an effluent quality of <45/45 mg/L for BOD5 and TSS respectively;
- **Type 3:** Septic tank, activated sludge, and disinfection resulting in an effluent quality of <10/10 mg/L for BOD5 and TSS respectively as well as a significant reduction in pathogens prior to disposal.

For the purposes of this development, L&M Engineering has only considered viable methods for onsite sewage treatment and disposal that involve Type 1 treatment system options that are consistent with typical installations in the region.

4.5. SEWAGE SYSTEM RECOMMENDATIONS

Based on the Northern Health Guidelines for Subdivision, the sizing of the absorption field areas is to be based upon a typical 4-bedroom home daily design flow of 1,600 L/day. The recommended methods of onsite sewage treatment and disposal to support the proposed 4-lot residential subdivision include:

Primary Recommendation

- **Lots 1, 2 – Type 1 Treatment Subgrade Gravity Distribution System**
 - Can be applied to high permeability soils and sufficient vertical separation to a water table or restrictive layer.
 - Consist of a septic tank and subgrade trenches.
 - Dimensions:
 - System contour length = 18m
 - Loading area = 48.6m²
- **Lot 3 – Type 1 Treatment 60cm Raised Bed Pressurized Disposal System with Timed Dosing**
 - Can be applied to sites with low permeable soils and minimal vertical separation to a water table or restrictive layer.
 - Consist of a septic tank, pump tank, and an above-grade specified sand disposal bed.
 - Dimensions:
 - System contour length = 40m
 - Sand loading area = 36m²
 - Basal area = 108m²

- **Lot 4** – Type 1 Treatment At-Grade Pressurized Disposal System with Timed Dosing
 - Can be applied to semi-permeable soils and sufficient vertical separation to a water table or restrictive layer.
 - Consist of a septic tank, pump tank, and an at-grade specified sand disposal bed.
 - Dimensions:
 - System contour length = 30m
 - Sand loading area = 60m²

Alternatives

- **Lot 1, 2, 4** – Type 1 Treatment 45cm Raised Bed Pressurized Disposal System with Timed Dosing
- **Lot 1, 2** – Type 1 Treatment At-Grade Pressurized Disposal System with Timed Dosing

An example of a suitable onsite sewage treatment and disposal system for the proposed lots is shown on drawing 001 in Appendix B to demonstrate serviceability.

The general system arrangements shown are based on a typical 4-bedroom dwelling and only examples and are not intended for construction nor are they intended to be restrictive in future development plans. Additional verification in order to implement these options will be necessary as the soil profile is highly variable on the subject property and is dependent on future building plans and lot arrangements.

Property owners are required to have a Qualified Professional submit a site-specific design and Sewerage System Record application to the Health Authority for acceptance prior to receiving a building permit. Prior to building occupancy and use of the sewage system, a Letter of Certification from a Qualified Professional must be submitted and accepted by the Health Authority in accordance with the Sewerage System Regulation of British Columbia.

5.0 DISCLOSURE

The recommendations made in this report are generalized for a proposed single-family dwelling on a 0.9 ha or larger as demonstrated on the drawings. Detailed onsite sewage system design is required and shall be specific to future home development in accordance with the SSR and current regulations.

The contents of this report are presented for the exclusive use of Deanna Steward, the Ministry of Transportation and Infrastructure, and the Peace River Regional District. Any use, reliance on, or decisions made based on the contents of the report by third parties are the responsibility of such third parties. L&M Engineering Limited accepts no liability or responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this study.

The information and data contained within this document represent L&M Engineering Limited's professional judgment in accordance with the knowledge and information available to L&M Engineering Limited at the time of the report preparation. No other warranty, expressed or implied.

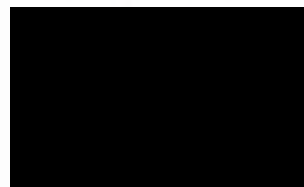
If you have any questions regarding the contents of this report, please feel free to contact the undersigned directly.

L&M ENGINEERING LIMITED

Prepared by:

Nioma El-fatihi,
Civil Eng. Assistant

Reviewed by:



Jamie Schenkeveld, P.Eng.
Principal

**Appendix A:
Onsite Sewage Evaluation Data**

Site Evaluation Photos

Client: Deanna Steward

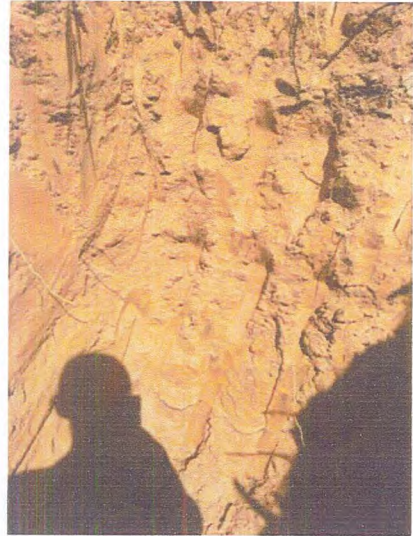
Job: 1913-01

District Lot 1889 Peace River Land District Except Plan PGP17392

5889 E. Centennial Road, Moberly Lake, BC



Proposed Lot 1



Test Pit 1



Proposed Lot 2



Test Pit 2

Site Evaluation Photos

Client: Deanna Steward

Job: 1913-01

District Lot 1889 Peace River Land District Except Plan PGP17392

5889 E. Centennial Road, Moberly Lake, BC



Test Pit 3



Proposed Lot 2



Test Pit 4



Test Pit 5

Site Evaluation Photos

Client: Deanna Steward

Job: 1913-01

District Lot 1889 Peace River Land District Except Plan PGP17392

5889 E. Centennial Road, Moberly Lake, BC



Top of Proposed Lot 4



Test Pit 6



Bottom of Proposed Lot 4



Test Pit 7

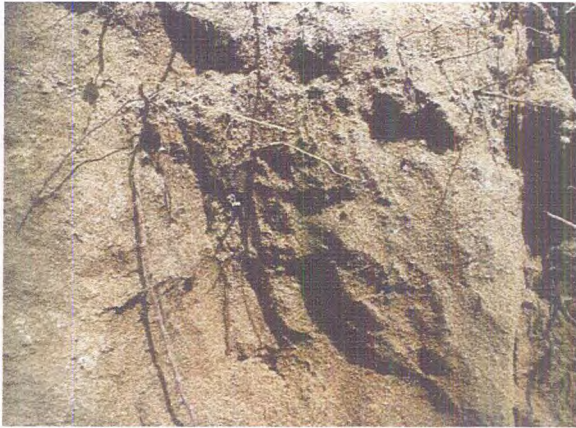
Site Evaluation Photos

Client: Deanna Steward

Job: 1913-01

District Lot 1889 Peace River Land District Except Plan PGP17392

5889 E. Centennial Road, Moberly Lake, BC



Test Pit 8



Proposed Lot 3



Test Pit 9



Test Pit 10

Site Evaluation Photos

Client: Deanna Steward

Job: 1913-01

District Lot 1889 Peace River Land District Except Plan PGP17392

5889 E. Centennial Road, Moberly Lake, BC



North side of Proposed Lot 4



Test Pit 11



North side of Proposed Lot 3



Test Pit 12

Site Evaluation Photos

Client: Deanna Steward

Job: 1913-01

District Lot 1889 Peace River Land District Except Plan PGP17392

5889 E. Centennial Road, Moberly Lake, BC



North side of Proposed Lot 2



Test Pit 13



Test Pit 14

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatihi

TP #: 1 Slope: 0 to 5% All direction

Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	25	Organic soil	5%	N/A	N/A	Dry	Light brown	None	N/A	N/A	Plenty	5-30
2	25	50	Fine Silty Sand	0%	Angular, Blocky	Moderate	Dry	Light brown	None	N/A	N/A	None	N/A
3	50	65	Silty Sand with Gravel	20%	Angular, Blocky	Moderate	Dry	Light brown	None	N/A	N/A	None	N/A
4	65	180	Sandy Silt Trace Clay	10%	Structureless	Weak	Dry	Light brown	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): Yes Ground water table: > 1.8 m Seasonal or Parched Water Table: > 1.8 m Restrictive horizon: > 1.8 m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatih

TP #: 2 Slope: 0 to 5% All direction

Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	20	Organic Soil	5%	N/A	N/A	Dry	Dark brown	None	N/A	N/A	Plenty	5-30
2	20	50	Silty Sand	20%	Platy	Weak	Dry	Brown	None	N/A	N/A	Some	5-10
3	50	70	Gravelly Sand	50%	Granular	Weak	Dry	Black-gray	None	N/A	N/A	None	N/A
4	70	110	Sandy Loam	10%	Structureless	Strong	Friable	Light brown	None	N/A	N/A	None	N/A
5	110	170	Sandy Loam with Gravel	30%	Granular	Weak	Dry	Black-gray	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: > 1.70 m Seasonal or Parched Water Table: > 1.70 m Restrictive horizon: > 1.70 m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatihi

TP #: 3 Slope: 0 to 5% All direction

Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	15	Organic Soil	N/A	N/A	N/A	Dry	Black-brown	None	N/A	N/A	Some	5-20
2	15	70	Sand with Coarse Gravel	40%	Structured	Moderate	Dry	Brown	None	N/A	N/A	None	N/A
3	70	100	Sand with Gravel	30%	Structured	Moderate	Dry	Brown	None	N/A	N/A	None	N/A
4	100	180	Clayey Sand	5%	Structured	Moderate	Dry	Brown	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: > 1.80 m Seasonal or Parched Water Table: > 1.80 m Restrictive horizon: > 1.80 m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatih

TP #: 4 Slope: 5 to 10% N to S
 Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	30	Organic Soil	N/A	N/A	N/A	Dry	Brown	None	N/A	N/A	Plenty	5-40
2	30	120	Clay Till	30%	Angular, Blocky	Strong	Dry, Firm	Brown	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: ~ 0.30m Seasonal or Parched Water Table: ~ 0.30m Restrictive horizon: ~ 0.30m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatihi

TP #: 5 Slope: 0 to 5% All direction
 Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	20	Organic Soil	N/A	N/A	N/A	Dry	Dark brown	None	N/A	N/A	Plenty	5-40
2	20	80	Sand Trace Silt with Gravel	15%	Platy	Strong	Dry, Firm	Brown	None	N/A	N/A	None	N/A
3	80	160	Sandy Silt with Gravel	5%	Platy	Moderate	Dry, Firm	Brown	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: > 1.60 m Seasonal or Parched Water Table: > 1.60 m Restrictive horizon: > 1.60 m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatih

TP #: 6 Slope: 10 to 15% N to S
 Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	20	Organic Soil	N/A	N/A	N/A	Dry	Black-brown	None	N/A	N/A	Plenty	5-20
2	20	70	Silty Sand Trace Clay	20%	Structured	Weak	Moist, Firm	Brown-orange	None	N/A	N/A	None	N/A
3	70	180	Sandy Silt	5%	Structured	Weak	Dry, Friable	Brown	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: > 1.80 m Seasonal or Parched Water Table: > 1.80 m Restrictive horizon: > 1.80 m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client: Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatihi

TP #: 7 Slope: 15 to 20% All direction
 Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	30	Organic Soil	N/A	N/A	N/A	Moist	Black-brown	None	N/A	N/A	Some	5-20
2	30	200	Sandy Silt Loam	15%	Granular	Moderate	Dry, Friable	Brown	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: > 2.00 m Seasonal or Parched Water Table: > 2.00 m Restrictive horizon: > 2.00 m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatih

TP #: 8 Slope: 15 to 20% N to S

Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	25	Organic Soil	N/A	N/A	N/A	Dry	Black-brown	None	N/A	N/A	Plenty	5-30
2	25	60	Sandy Loam with Gravel	10%	Granular	Weak	Moist	Brown	None	N/A	N/A	None	N/A
3	60	110	Fine Silty Sand	15%	Granular	Weak	Dry	Brown	None	N/A	N/A	None	N/A
4	110	130	Sand with Gravel	35%	Granular	Moderate	Dry	Brown	None	N/A	N/A	None	N/A
5	130	190	Fine Silty Sand	5%	Granular	Weak	Dry	Brown	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: > 1.90 m Seasonal or Parched Water Table: > 1.90 m Restrictive horizon: > 1.90 m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatihi

TP #: 9 Slope: 10 to 15% All direction

Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	30	Organic Soil	N/A	N/A	N/A	Dry	Black-brown	None	N/A	N/A	Some	5-20
2	30	90	Clay Till Trace Sand	20%	Granular	Weak	Dry	Brown-orange	None	N/A	N/A	None	N/A
3	90	160	Clay Till	15%	Platy	Moderate	Dry	Brown	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: > 1.60 m Seasonal or Parched Water Table: > 1.60 m Restrictive horizon: > 1.60 m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatih

TP #: 10 Slope: 10 to 15% All direction

Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	20	Organic Soil	N/A	N/A	N/A	Dry	Black-brown	None	N/A	N/A	Some	5-20
2	20	70	Clay Till	25%	Blocky	Moderate	Dry, Firm	Brown-orange	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: > 1.80 m Seasonal or Parched Water Table: > 1.80 m Restrictive horizon: > 1.80 m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatih

TP #: 11 Slope: 15 to 20% N to S
 Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	15	Organic Soil	N/A	N/A	N/A	Dry	Black-brown	None	N/A	N/A	Some	5-20
2	15	50	Silty Clay	10%	Structured	Moderate	Moist, Firm	Brown	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: > 0.50 m Seasonal or Parched Water Table: > 0.50 m Restrictive horizon: > 0.50 m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatihi

TP #: 12 Slope: 15 to 20% All direction
 Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	10	Organic Soil	N/A	N/A	N/A	Dry	Black-brown	None	N/A	N/A	Some	5-20
2	10	50	Structured Clay	5%	Blocky	Moderate	Moist	Brown	None	N/A	N/A	None	N/A
3	50	60	Silty Clay	15%	Structured	Moderate	Moist	Brown	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: > 1.60 m Seasonal or Parched Water Table: > 1.60 m Restrictive horizon: > 1.60 m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatih

TP #: 13 Slope: 15 to 20% All direction

Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	15	Organic Soil	N/A	N/A	N/A	Dry	Black-brown	None	N/A	N/A	Some	5-20
2	15	45	Silty Loam	10%	Structured	Weak	Dry	Brown	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: > 0.45 m Seasonal or Parched Water Table: > 0.45 m Restrictive horizon: > 0.45 m													

TEST PIT RESULT



Date: 2024-06-18
 File No.: 1913-01
 Client Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Sunny
 Completed By: Nioma El-fatihi

TP #: 14 Slope: 20 to 25% All direction

Description:

PROFILE DESCRIPTION													
	Depth (cm)		TEXTURE	C.F.	STRUCTURE		CONSISTENCE	COLOR	MOTTLES			ROOTS	
	From	To			TYPE	GRADE			QUANTITY	SIZE	CONTRAST	QUANTITY	SIZE (mm)
1	0	20	Organic Soil	N/A	N/A	N/A	Dry	Black-brown	None	N/A	N/A	Some	5-20
2	20	45	Silty Loamy Clay	< 5%	Structured	Moderate	Moist	Brown	None	N/A	N/A	None	N/A
Redoximorphic features (mottling/gleying): No Ground water table: > 0.45 m Seasonal or Parched Water Table: > 0.45 m Restrictive horizon: > 0.45 m													



PERMEAMETER TEST

Inputs
Outputs

Date: 2023-06-05
File No.: 1913-01
Client: Deanna Steward
Subject Location: 5889 E. Centennial Rd
Weather: Overcast
Completed By: Nioma El-fatih

Auger Hole #: 1
AH Depth: 500 (mm)
AH Diameter: 75 (mm)
Input Soil type (4,3,2) Clay liner=1 3
Test Location: TP#1 @ Grade

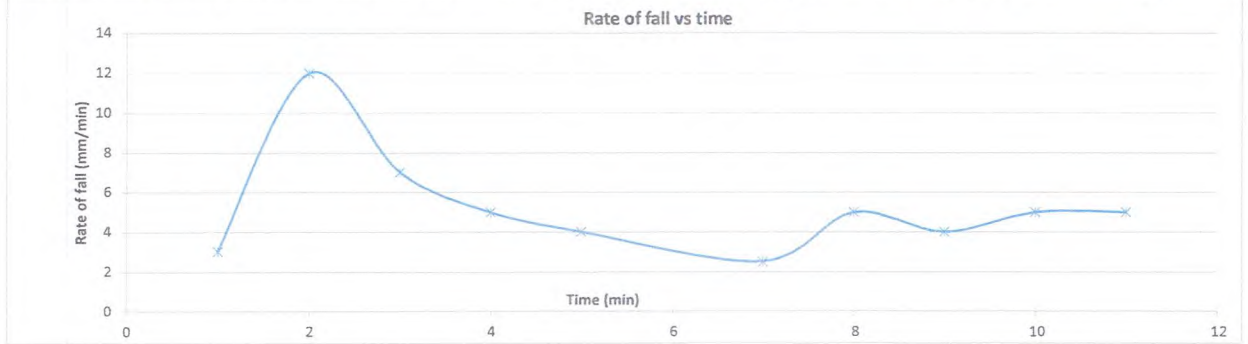
Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
0		489			Soil Description
1	1	486	3	3	Sandy Silt
2	1	474	12	12	
3	1	467	7	7	
4	1	462	5	5	
5	1	458	4	4	
7	2	453	5	2.5	
8	1	448	5	5	
9	1	444	4	4	
10	1	439	5	5	
11	1	434	5	5	

Note (5min to 30min typical duration to stabilize)

Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) =

Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)

Stable rate (mm/min)	5.3	X	Soil factor	56.4	=	Kfs (mm/day)	296
	mm		Alt Shallow layer Kfs =				N/A



4" Permeameter

Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter

AH Diameter (cm)	7	7.5	8	9	10	11	12		13
Coarse & gravelly Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7		47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1		38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3		25.0

AH Diameter (cm)	14	15	16	18	20	22	24		26
Coarse & gravelly Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5		27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2		22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5		15.6

Results based on a constant water depth of 20 cm
Results based on a permeameter reservoir inside diameter of 10.23 cm



PERMEAMETER TEST

Inputs
Outputs

Date: 2024-06-18
 File No.: 1913-01
 Client: Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Overcast
 Completed By: Nioma El-fatih

Auger Hole #: 2
 AH Depth: 500 (mm)
 AH Diameter: 75 (mm)
 Input Soil type (4,3,2) Clay liner=1 3

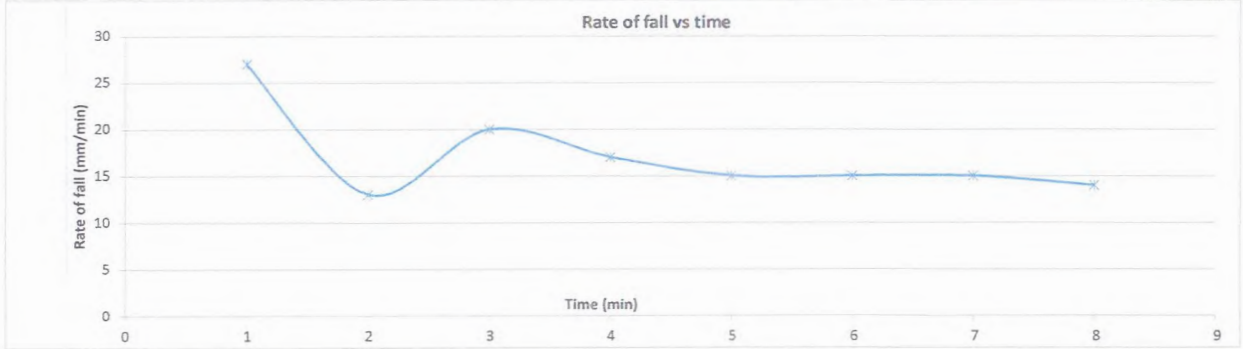
Test Location: TP2 @ 50cm bench

Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
	0	298			Soil Description
1	1	271	27	27	Sand Trace Clay
2	1	258	13	13	
3	1	238	20	20	
4	1	221	17	17	
5	1	206	15	15	
6	1	191	15	15	
7	1	176	15	15	
8	1	162	14	14	

Note (5min to 30min typical duration to stabilize)

Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) =
 Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)

Stable rate (mm/min) **17.0** X Soil factor **56.4** = **Kfs (mm/day) 959**
 Alt Shallow layer Kfs = N/A



4" Permeameter

Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter

AH Diameter (cm)	7	7.5	8	9	10	11	12	13
Coarse & gravelly Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7	47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1	38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3	25.0
AH Diameter (cm)	14	15	16	18	20	22	24	26
Coarse & gravelly Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5	27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2	22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5	15.6

Results based on a constant water depth of 20 cm
 Results based on a permeameter reservoir inside diameter of 10.23 cm



PERMEAMETER TEST

Inputs
Outputs

Date: 2023-06-05
File No.: 1913-01
Client: Deanna Steward
Subject Location: 5889 E. Centennial Rd
Weather: Overcast
Completed By: Nioma El-fatihi

Auger Hole #: 3
AH Depth: 500 (mm)
AH Diameter: 75 (mm)
Input Soil type (4,3,2) Clay liner=1 3

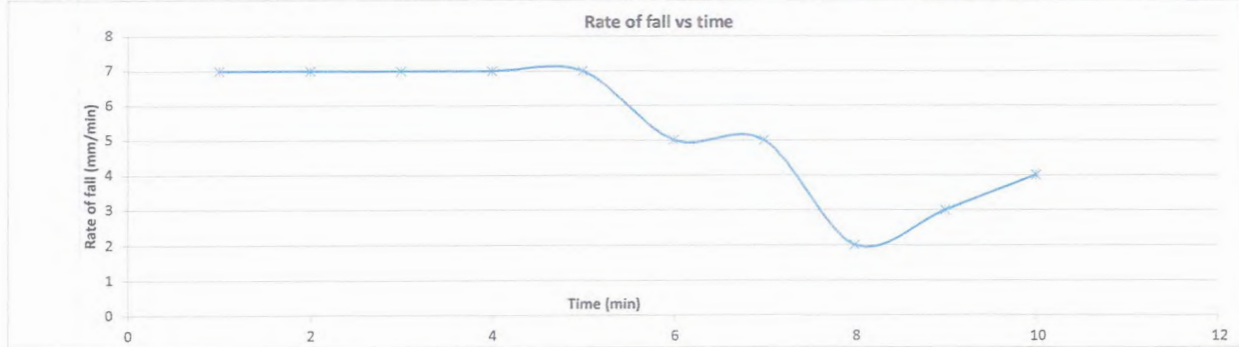
Test Location: TP#3 @ 70cm bench

Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
0		179			Soil Description
1	1	172	7	7	Clayey Sand
2	1	165	7	7	
3	1	158	7	7	
4	1	151	7	7	
5	1	144	7	7	
6	1	139	5	5	
7	1	134	5	5	
8	1	132	2	2	
9	1	129	3	3	
10	1	125	4	4	

Note (5min to 30min typical duration to stabilize)

Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) =
Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)

Stable rate (mm/min) **5.4** X Soil factor **56.4** = **Kfs (mm/day) 305**
Alt Shallow layer Kfs = N/A



4" Permeameter

Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter

AH Diameter (cm)	7	7.5	8	9	10	11	12	13
Coarse & gravelly Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7	47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1	38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3	25.0

AH Diameter (cm)	14	15	16	18	20	22	24	26
Coarse & gravelly Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5	27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2	22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5	15.6

Results based on a constant water depth of 20 cm
Results based on a permeameter reservoir inside diameter of 10.23 cm



PERMEAMETER TEST

Date: 2024-06-18
 File No.: 1913-01
 Client: Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Overcast
 Completed By: Nioma El-fatihi

Auger Hole #: 4
 AH Depth: 500 (mm)
 AH Diameter: 75 (mm)
 Input Soil type (4,3,2) Clay liner=1 3

Test Location: TP#4 @ Grade

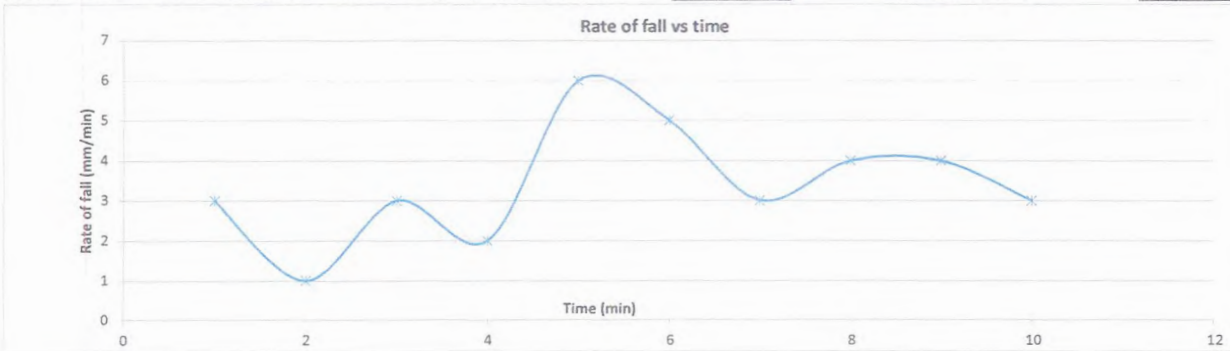
Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
0		434			Soil Description
1	1	431	3	3	Clay Till
2	1	430	1	1	
3	1	427	3	3	
4	1	425	2	2	
5	1	419	6	6	
6	1	414	5	5	
7	1	411	3	3	
8	1	407	4	4	
9	1	403	4	4	
10	1	400	3	3	

Note (5min to 30min typical duration to stabilize)

Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) =

Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)

Stable rate (mm/min)	3.4	X	Soil factor	56.4	=	Kfs (mm/day)	192
			Alt Shallow layer Kfs =				N/A



4" Permeameter

Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter

AH Diameter (cm)	7	7.5	8	9	10	11	12	13
Coarse & gravely Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7	47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1	38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3	25.0

AH Diameter (cm)	14	15	16	18	20	22	24	26
Coarse & gravely Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5	27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2	22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5	15.6

Results based on a constant water depth of 20 cm
 Results based on a permeameter reservoir inside diameter of 10.23 cm



PERMEAMETER TEST

Inputs
Outputs

Date: 2023-06-05
File No.: 1913-01
Client: Deanna Steward
Subject Location: 5889 E. Centennial Rd
Weather: Overcast
Completed By: Nioma El-fatih

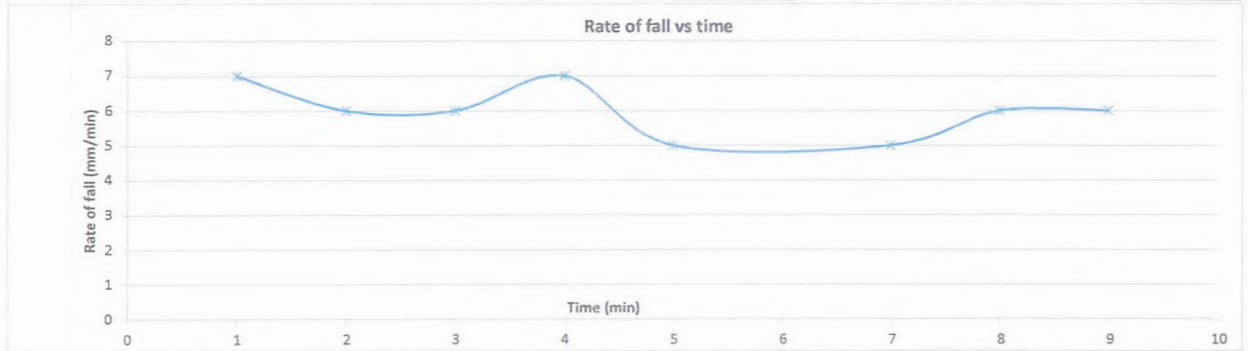
Auger Hole #: 5
AH Depth: 500 (mm)
AH Diameter: 75 (mm)
Input Soil type (4,3,2) Clay liner=1 3
Test Location: TP#5 @ 60cm bench

Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
0		315			Soil Description
1	1	308	7	7	Silty Sand with Gravel
2	1	302	6	6	
3	1	296	6	6	
4	1	289	7	7	
5	1	284	5	5	
7	1	279	5	5	
8	1	273	6	6	
9	1	267	6	6	

Note (5min to 30min typical duration to stabilize)

Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) =
Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)

Stable rate (mm/min)	X	Soil factor	=	Kfs (mm/day)
6.0		56.4		339
		Alt Shallow layer Kfs =		N/A



4" Permeameter

Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter

AH Diameter (cm)	7	7.5	8	9	10	11	12		13
Coarse & gravely Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7		47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1		38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3		25.0
AH Diameter (cm)	14	15	16	18	20	22	24		26
Coarse & gravely Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5		27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2		22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5		15.6

Results based on a constant water depth of 20 cm
Results based on a permeameter reservoir inside diameter of 10.23 cm



PERMEAMETER TEST

Inputs
Outputs

Date: 2023-06-05
 File No.: 1913-01
 Client: Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Overcast
 Completed By: Nioma El-fatih

Auger Hole #: 6
 AH Depth: 500 (mm)
 AH Diameter: 75 (mm)
 Input Soil type (4,3,2) Clay liner=1 3
 Test Location: TP#6 @ grade

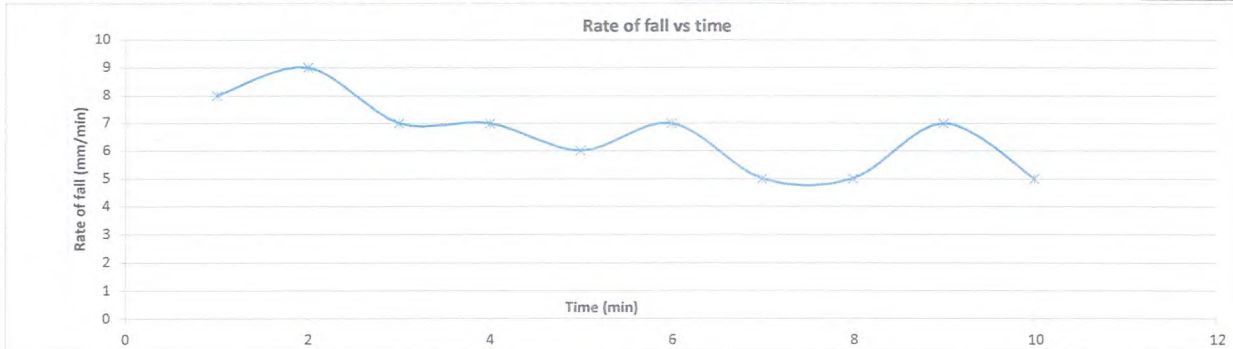
Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
0		416			Soil Description
1	1	408	8	8	Silty Sand Trace Clay
2	1	399	9	9	
3	1	392	7	7	
4	1	385	7	7	
5	1	379	6	6	
6	1	372	7	7	
7	1	367	5	5	
8	1	362	5	5	
9	1	355	7	7	
10	1	350	5	5	

Note (5min to 30min typical duration to stabilize)

Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) =

Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)

Stable rate (mm/min)	6.6	X	Soil factor	56.4	=	Kfs (mm/day)	372
	mm		Alt Shallow layer Kfs =				N/A



4" Permeameter

Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter

AH Diameter (cm)	7	7.5	8	9	10	11	12	13
Coarse & gravely Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7	47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1	38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3	25.0

AH Diameter (cm)	14	15	16	18	20	22	24	26
Coarse & gravely Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5	27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2	22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5	15.6

Results based on a constant water depth of 20 cm
 Results based on a permeameter reservoir inside diameter of 10.23 cm



PERMEAMETER TEST

Inputs
Outputs

Date: 2023-06-05
 File No.: 1913-01
 Client: Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Overcast
 Completed By: Nioma El-fatih

Auger Hole #: 7
 AH Depth: 300 (mm)
 AH Diameter: 75 (mm)
 Input Soil type (4,3,2) Clay liner=1 3
 Test Location: TP#7 @ 50cm bench

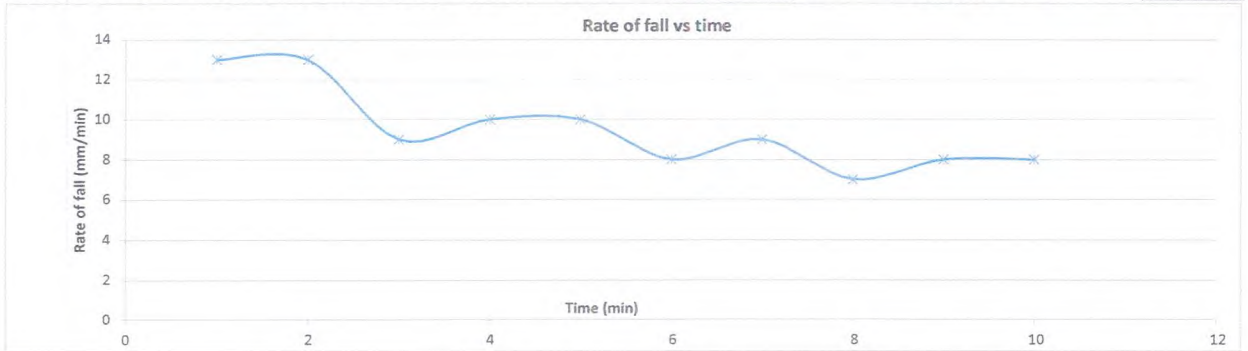
Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
0		205			Soil Description
1	1	192	13	13	Sandy Silt Loam
2	1	179	13	13	
3	1	170	9	9	
4	1	160	10	10	
5	1	150	10	10	
6	1	142	8	8	
7	1	133	9	9	
8	1	126	7	7	
9	1	118	8	8	
10	1	110	8	8	

Note (5min to 30min typical duration to stabilize)

Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) =

Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)

Stable rate (mm/min)	X	Soil factor	=	Kfs (mm/day)
9.5		56.4		536
	mm	Alt Shallow layer Kfs =		N/A



4" Permeameter

Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter

AH Diameter (cm)	7	7.5	8	9	10	11	12	13
Coarse & gravelly Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7	47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1	38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3	25.0
AH Diameter (cm)	14	15	16	18	20	22	24	26
Coarse & gravelly Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5	27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2	22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5	15.6

Results based on a constant water depth of 20 cm
 Results based on a permeameter reservoir inside diameter of 10.23 cm



PERMEAMETER TEST

Inputs
Outputs

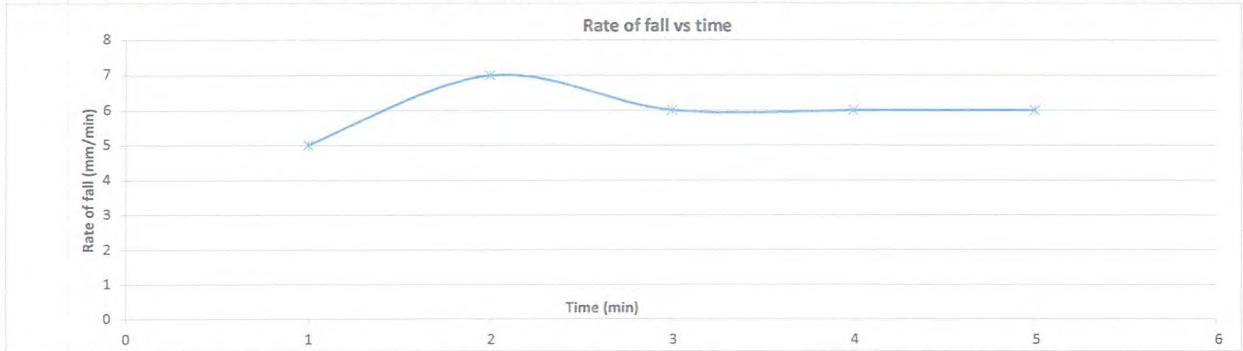
Date: 2023-06-05
File No.: 1913-01
Client: Deanna Steward
Subject Location: 5889 E. Centennial Rd
Weather: Overcast
Completed By: Nioma El-fatih

Auger Hole #: 8
AH Depth: 500 (mm)
AH Diameter: 75 (mm)
Input Soil type (4,3,2) Clay liner=1 3
Test Location: TP#8 @ grade

Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
0		384			Soil Description
1	1	379	5	5	Sandy Loam with Fine Gravel
2	1	372	7	7	
3	1	366	6	6	
4	1	360	6	6	
5	1	354	6	6	

Note (5min to 30min typical duration to stabilize)
 Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) =
 Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)

Stable rate (mm/min)	6.0	X	Soil factor	56.4	=	Kfs (mm/day)	339
			Alt Shallow layer Kfs =				N/A



4" Permeameter

AH Diameter (cm)	Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter							
	7	7.5	8	9	10	11	12	13
Coarse & gravelly Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7	47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1	38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3	25.0
AH Diameter (cm)	14	15	16	18	20	22	24	26
Coarse & gravelly Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5	27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2	22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5	15.6

Results based on a constant water depth of 20 cm
 Results based on a permeameter reservoir inside diameter of 10.23 cm



PERMEAMETER TEST

Inputs
Outputs

Date: 2023-06-05
File No.: 1913-01
Client: Deanna Steward
Subject Location: 5889 E. Centennial Rd
Weather: Overcast
Completed By: Nioma El-fatih

Auger Hole #: 9
AH Depth: 300 (mm)
AH Diameter: 75 (mm)
Input Soil type (4,3,2) Clay liner=1 3
Test Location: TP#9 @ 30cm bench

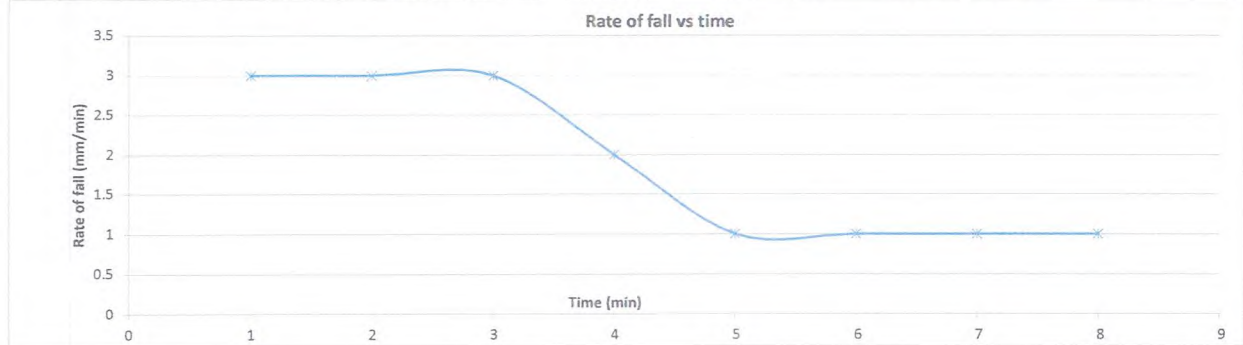
Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
0		191			Soil Description
1	1	188	3	3	Clay Till Trace Sand
2	1	185	3	3	
3	1	182	3	3	
4	1	180	2	2	
5	1	179	1	1	
6	1	178	1	1	
7	1	177	1	1	
8	1	176	1	1	

Note (5min to 30min typical duration to stabilize)

Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) =

Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)

Stable rate (mm/min)	X	Soil factor	=	Kfs (mm/day)
1.9	X	56.4	=	106
mm		Alt Shallow layer Kfs =		N/A



4" Permeameter

Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter

AH Diameter (cm)	7	7.5	8	9	10	11	12	13
Coarse & gravelly Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7	47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1	38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3	25.0

AH Diameter (cm)	14	15	16	18	20	22	24	26
Coarse & gravelly Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5	27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2	22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5	15.6

Results based on a constant water depth of 20 cm
Results based on a permeameter reservoir inside diameter of 10.23 cm



PERMEAMETER TEST

Inputs
Outputs

Date: 2023-06-05
File No.: 1913-01
Client: Deanna Steward
Subject Location: 5889 E. Centennial Rd
Weather: Overcast
Completed By: Nioma El-fatihi

Auger Hole #: 10
AH Depth: 500 (mm)
AH Diameter: 75 (mm)
Input Soil type (4,3,2) Clay liner=1 3
Test Location: Upper Lot 4 @ grade

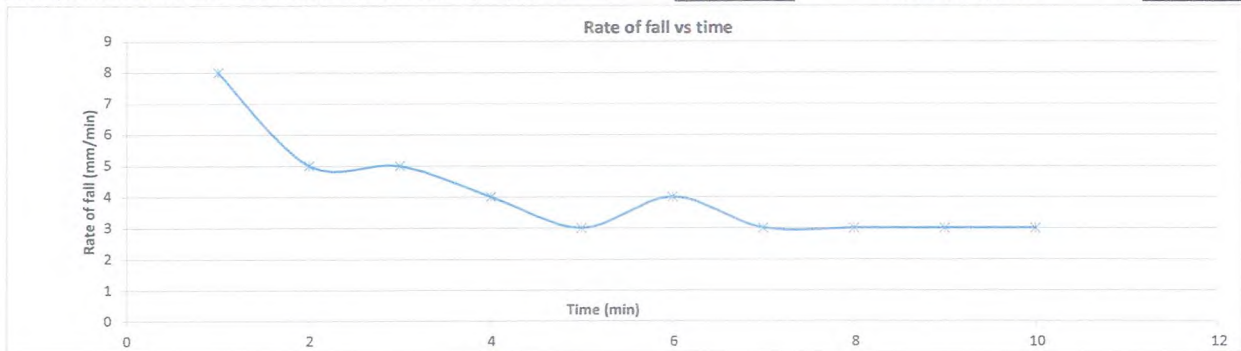
Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
0		63			Soil Description
1	1	55	8	8	Silty Clay
2	1	50	5	5	
3	1	45	5	5	
4	1	41	4	4	
5	1	38	3	3	
6	1	34	4	4	
7	1	31	3	3	
8	1	28	3	3	
9	1	25	3	3	
10	1	22	3	3	

Note (5min to 30min typical duration to stabilize)

Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) =

Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)

Stable rate (mm/min)	4.1	X	Soil factor	56.4	=	Kfs (mm/day)	231
	mm		Alt Shallow layer Kfs =				N/A



4" Permeameter

Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter

AH Diameter (cm)	7	7.5	8	9	10	11	12	13
Coarse & gravely Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7	47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1	38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3	25.0

AH Diameter (cm)	14	15	16	18	20	22	24	26
Coarse & gravely Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5	27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2	22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5	15.6

Results based on a constant water depth of 20 cm
Results based on a permeameter reservoir inside diameter of 10.23 cm



PERMEAMETER TEST

Inputs
Outputs

Date: 2023-06-05
File No.: 1913-01
Client: Deanna Steward
Subject Location: 5889 E. Centennial Rd
Weather: Overcast
Completed By: Nioma El-fatih

Auger Hole #: 11
AH Depth: 600 (mm)
AH Diameter: 75 (mm)
Input Soil type (4,3,2) Clay liner=1
Test Location: Upper Lot 3 @ grade

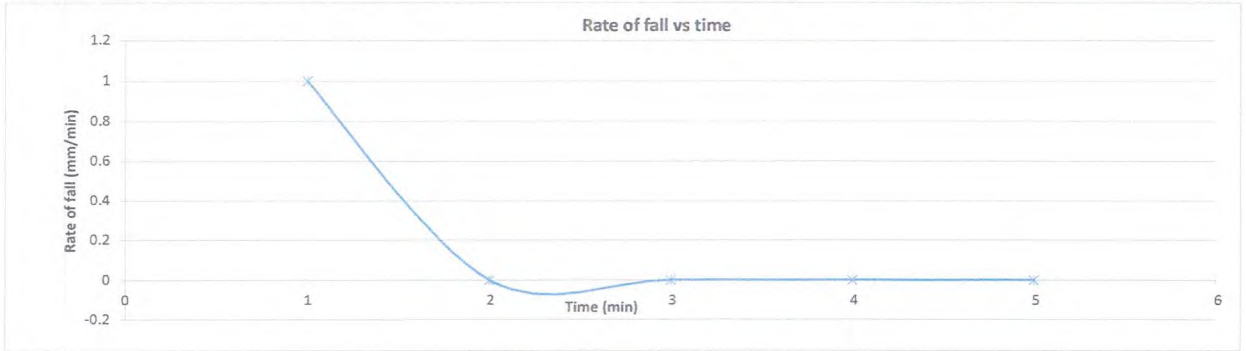
Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
0		408			Soil Description
1	1	407	1	1	Structured Clay
2	1	407	0	0	
3	1	407	0	0	
4	1	407	0	0	
5	1	407	0	0	

Note (5min to 30min typical duration to stabilize)

Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) =

Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)

Stable rate (mm/min)	X	Soil factor	=	Kfs (mm/day)
0.2		56.4		11
Alt Shallow layer Kfs =				N/A



4" Permeameter

Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter

AH Diameter (cm)	7	7.5	8	9	10	11	12	13
Coarse & gravely Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7	47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1	38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3	25.0
AH Diameter (cm)	14	15	16	18	20	22	24	26
Coarse & gravely Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5	27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2	22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5	15.6

Results based on a constant water depth of 20 cm
Results based on a permeameter reservoir inside diameter of 10.23 cm



PERMEAMETER TEST

Inputs
Outputs

Date: 2023-06-05
File No.: 1913-01
Client: Deanna Steward
Subject Location: 5889 E. Centennial Rd
Weather: Overcast
Completed By: Nioma El-fatih

Auger Hole #: 12
AH Depth: 500 (mm)
AH Diameter: 75 (mm)
Input Soil type (4,3,2) Clay liner=1 3

Test Location: Upper Lot 2 @ grade

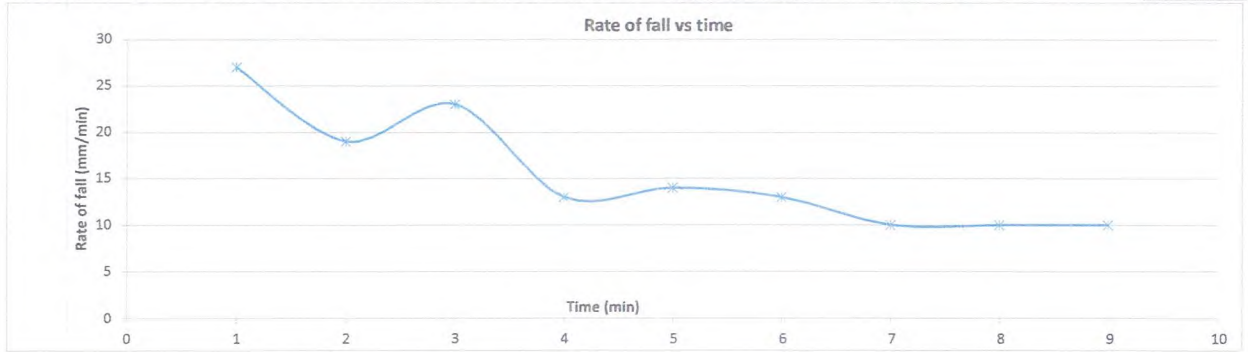
Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
0		296			Soil Description
1	1	269	27	27	Silty Loam
2	1	250	19	19	
3	1	227	23	23	
4	1	214	13	13	
5	1	200	14	14	
6	1	187	13	13	
7	1	177	10	10	
8	1	167	10	10	
9	1	157	10	10	

Note (5min to 30min typical duration to stabilize)

Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) =

Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)

Stable rate (mm/min)	15.4	X	Soil factor	56.4	=	Kfs (mm/day)	872
	mm		Alt Shallow layer Kfs =	N/A			



4" Permeameter

Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter

AH Diameter (cm)	7	7.5	8	9	10	11	12	13
Coarse & gravelly Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7	47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1	38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3	25.0

AH Diameter (cm)	14	15	16	18	20	22	24	26
Coarse & gravelly Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5	27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2	22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5	15.6

Results based on a constant water depth of 20 cm
Results based on a permeameter reservoir inside diameter of 10.23 cm



PERMEAMETER TEST

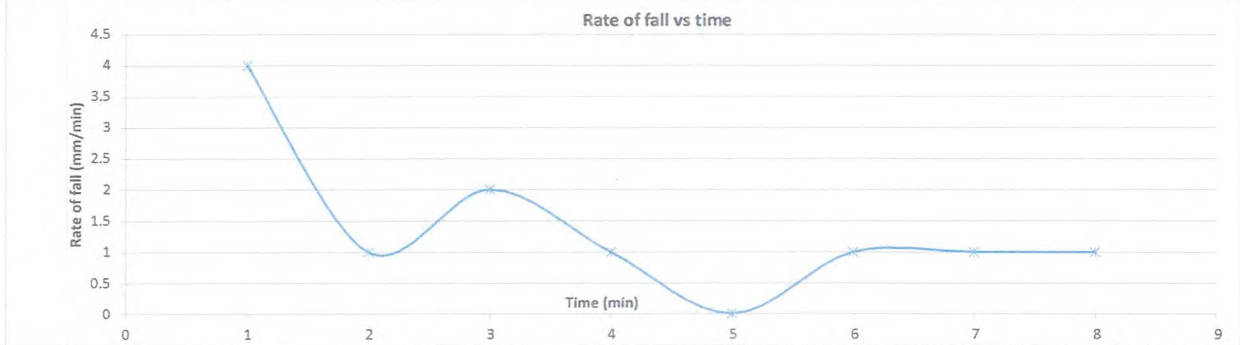
Inputs
Outputs

Date: 2023-06-05
 File No.: 1913-01
 Client: Deanna Steward
 Subject Location: 5889 E. Centennial Rd
 Weather: Overcast
 Completed By: Nioma El-fatih

Auger Hole #: 13
 AH Depth: 450 (mm)
 AH Diameter: 75 (mm)
 Input Soil type (4,3,2) Clay liner=1 3
 Test Location: Upper Lot 1 @ grade

Total Elapsed Min	Interim Time (Min)	Water Level Reading (mm)	Drop in Level (mm)	Rates of fall (mm/min)	Remarks of Observations
0		45			Soil Description
1	1	41	4	4	Silty Loamy Clay
2	1	40	1	1	
3	1	38	2	2	
4	1	37	1	1	
5	1	37	0	0	
6	1	36	1	1	
7	1	35	1	1	
8	1	34	1	1	

Note (5min to 30min typical duration to stabilize)
 Calculated Soil field saturated hydraulic conductivity Kfs (mm/day) = 78
 Input depth from bottom of test hole to shallow restrictive layer (50-400 mm)
 Stable rate (mm/min) 1.4 X Soil factor 56.4 = Kfs (mm/day) 78
 Alt Shallow layer Kfs = N/A



4" Permeameter

Soil Factors to use in the calculation of the Kfs with the L&M Engineering Limited 4" permeameter

AH Diameter (cm)	7	7.5	8	9	10	11	12	13
Coarse & gravelly Sand (4)	73.0	69.8	67.0	61.9	57.6	53.9	50.7	47.8
Structured Loams + Clay (med & fine sand) (3)	58.9	56.4	54.1	50.1	46.7	43.7	41.1	38.8
Unstructured Clay (2)	36.3	34.9	33.6	31.4	29.5	27.8	26.3	25.0
AH Diameter (cm)	14	15	16	18	20	22	24	26
Coarse & gravelly Sand (4)	45.2	43.0	40.9	37.3	34.3	31.7	29.5	27.5
Structured Loams + Clay (med & fine sand) (3)	36.8	35.0	33.3	30.5	28.1	26.0	24.2	22.7
Unstructured Clay (2)	23.9	22.8	21.9	20.2	18.8	17.6	16.5	15.6

Results based on a constant water depth of 20 cm
 Results based on a permeameter reservoir inside diameter of 10.23 cm

**Appendix B:
Sewage Suitability Assessment Drawings**



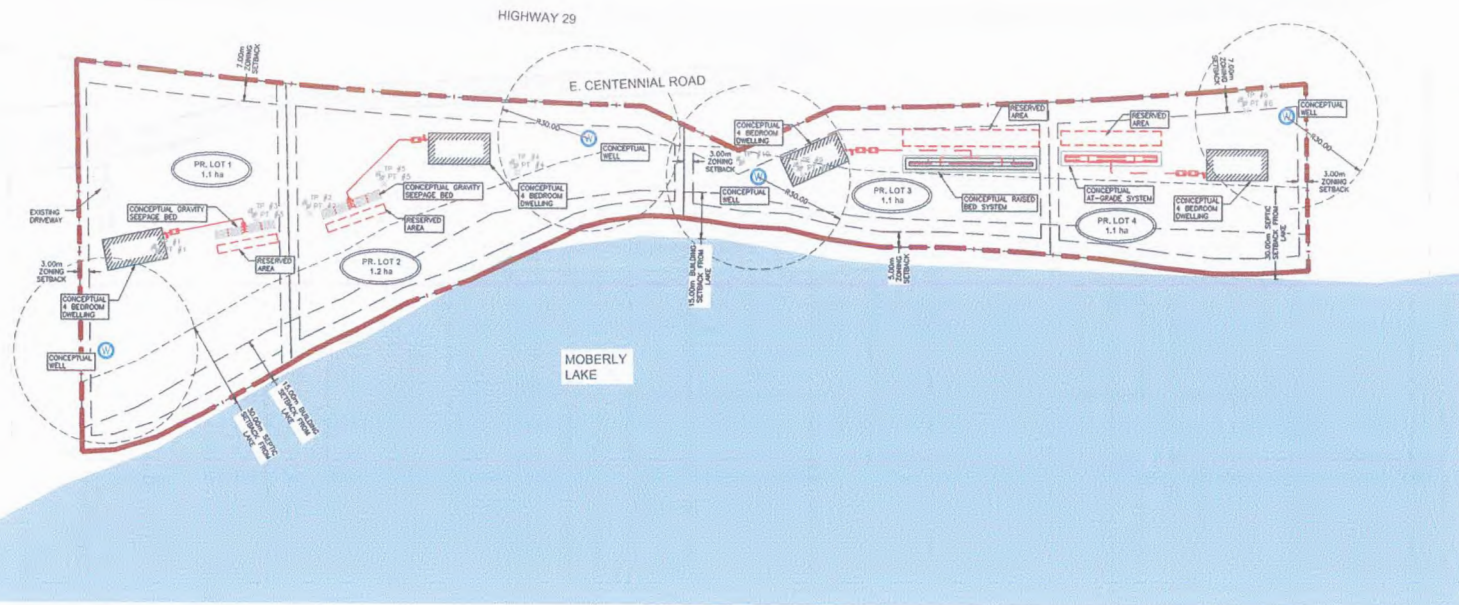
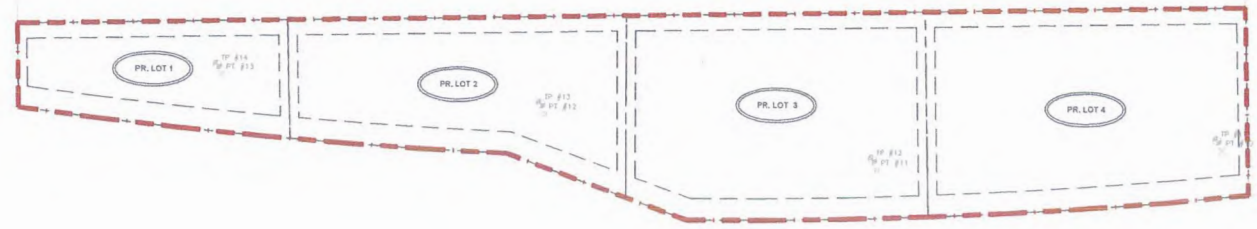
EXISTING LEGAL DESCRIPTION
 DISTRICT LOT 1889 PEACE RIVER LAN DISTRICT
 EXCEPT PLAN PGP17392
 PID: 005-606-331

EXISTING ZONING: R4
PROPOSED ZONING: R3

PROPERTY AREA: 4.57 ha (11.29 acres)

SURVEY NOTES:

1. PROPERTY LINES SHOWN ARE APPROXIMATE.
2. UNDERGROUND SERVICES AND LOCATIONS ARE APPROXIMATE AND MUST BE VERIFIED BEFORE EXCAVATION.



OVERALL SITE PLAN
 SCALE: 1:750

LEGEND

EXISTING

- EX. TEST PIT & GRAVE HOLE
- EX. BENCHMARK & SURVEY MARKS
- EX. PT & LENS
- EX. LEGAL LINE
- EX. LEGAL R.O.W. & easement
- EX. SANITARY & MANHOLE
- EX. SANITARY FORCE MAIN
- EX. STORM & MANHOLE
- EX. GROUND & DRAINAGE CATCH-BASIN (ON CE LEAD)
- EX. CATCH-BASIN MANHOLE
- EX. GULLY
- EX. FIRE-HYDRANT & VALVE ASSEMBLY
- EX. WATERMAIN & VALVE
- EX. BURN-OFF ASSEMBLY
- EX. CURB TOP
- EX. ROAD & SIDEWALK
- EX. ROAD SIGN
- EX. BRICKWORK
- EX. TOP OF SLOPE
- EX. 10% OF SLOPE
- EX. DITCH & SWALE
- EX. FENCE
- EX. OVERHEAD LINES
- EX. UNDERGROUND LINES
- EX. POWER POLE & MAST
- EX. GAS MAIN

PROPOSED

- PR. LEGAL LINE
- PR. LEGAL R.O.W. & easement
- PR. SANITARY & MANHOLE
- PR. STORM & MANHOLE
- PR. GROUND & DRAINAGE CATCH-BASIN (ON CE LEAD)
- PR. CATCH-BASIN MANHOLE
- PR. GULLY
- PR. DITCH & SWALE
- PR. FIRE-HYDRANT & VALVE ASSEMBLY
- PR. WATERMAIN & VALVE
- PR. GULLY OFF-SPRINGS
- PR. ASPHALT
- PR. CONCRETE SIDEWALK
- PR. ROAD SIGN
- PR. SEWAGE DISPOSAL FIELD
- PR. SEWAGE DISPOSAL FIELD
- PR. DEVELOPMENT BOUNDARY

NO.	DATE (DD/MM/YY)	REVISION	BY

NOT FOR CONSTRUCTION



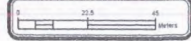
CONSULTANT'S PROJECT No: 1913-01

DRAWN: HE	CHECKED: JSS	DATE: 16/04/2024
ENGINEER: JSS	SCALE: FULL 1:750	SCALE: HALF 1:1575

DEANNA STEWARD
 5889 E. CENTENNIAL ROAD
 MOBERLY LAKE, BC
 4 LOT SUBDIVISION
 SEWAGE SUITABILITY ASSESSMENT
 OVERALL SITE PLAN

DRAWING No. **001**

ISSUED FOR REVIEW



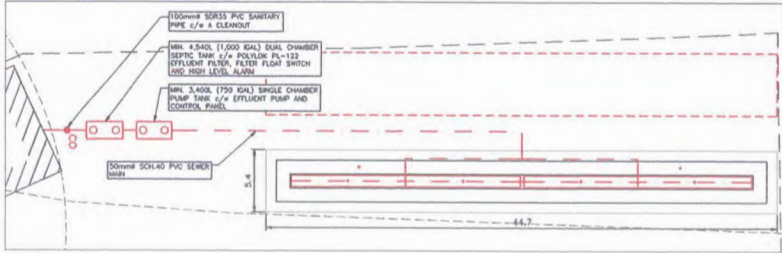
THIS DRAWING IS AN INSTRUMENT OF SERVICE. IT IS THE PROPERTY OF LAW ENGINEERING LIMITED AND MAY NOT BE REPRODUCED WITHOUT WRITTEN PERMISSION OF SUCH AND UNLESS THE REPRODUCTION SERVICES THEIR OWN. ALL DESIGN AND OTHER INFORMATION SHOWN ON THIS DRAWING ARE FOR USE ON THE SPECIFIC PROJECT ONLY AND SHALL NOT BE USED THEREAFTER WITHOUT WRITTEN PERMISSION OF LAW ENGINEERING LIMITED.

DESIGN NOTES
 DDF = 1,500 L/D (4 BEDROOM DWELLING)

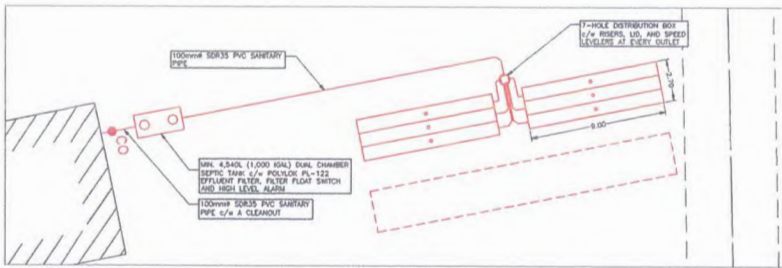
LOT 1, 2 - GRAVITY SEEPAGE BED
 SOIL TYPE = SAND WITH GRAVEL
 DESIGN BASAL HLR = 30L/D/m²
 DESIGN LLR = 90 L/D/m

LOT 3 - 60cm RAISED BED WITH MICRO-DOSE
 SOIL TYPE = CLAY TILL
 DESIGN BASAL HLR = 12.1 L/D/m²
 DESIGN LLR = 40 L/D/m

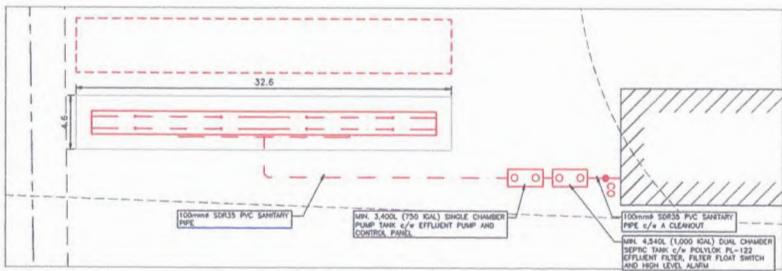
LOT 4 - AT-GRADE PRESSURIZED DISPERSAL FIELD
 SOIL TYPE = LOAM
 DESIGN BASAL HLR = 26.7 L/D/m²
 DESIGN LLR = 53.3 L/D/m



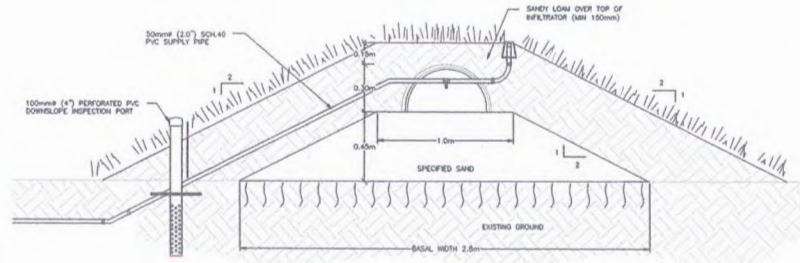
CONCEPTUAL RAISED BED PLAN
 SCALE 1:200



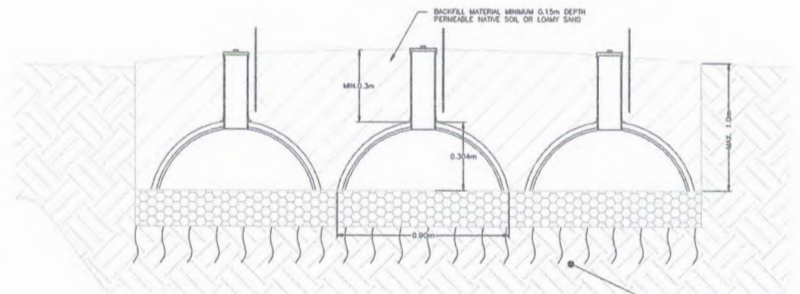
CONCEPTUAL GRAVITY SEEPAGE BED PLAN
 SCALE 1:150



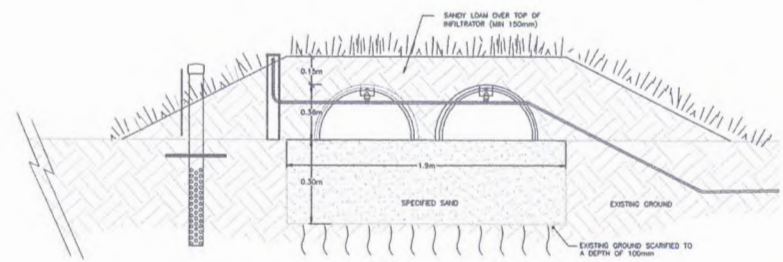
CONCEPTUAL AT-GRADE DISPERSAL FIELD PLAN
 SCALE 1:200



RAISED BED SECTION TYPICAL DETAIL
 N.T.S.



GRAVITY SEEPAGE BED SECTION TYPICAL DETAILS
 SCALE N.T.S.



AT-GRADE DISPERSAL FIELD SECTION TYPICAL DETAILS
 SCALE N.T.S.

LEGEND

EXISTING

- EX. TEST PIT & DRILL HOLE
- EX. BENCHMARK & SURVEY MARKS
- EX. IP's & BMP's
- EX. LEGAL LINE
- EX. LEGAL E.O.W. & EASEMENT
- EX. SANITARY & MANHOLE
- EX. SANITARY FORCE MAIN
- EX. STORM & MANHOLE
- EX. STORM & DOUBLE CATCH-BASIN ON CE LEADS
- EX. CATCH-BASIN MANHOLE
- EX. COLLECT
- EX. PRE-VENTION & VALVE ASSEMBLY
- EX. INTERMEDIATE VALVE
- EX. BLOW-OFF ASSEMBLY
- EX. CURB STOP
- EX. ROAD & INTERSECT
- EX. ROAD BRIDGE
- EX. BROADEN
- EX. TOP OF EDGE
- EX. TOP OF SLOPE
- EX. DITCH & SWALE
- EX. FENCE
- EX. OVERHEAD LINES
- EX. UNDERGROUND LINES
- EX. POWER POLES & MASTS
- EX. GAS MAIN

PROPOSED

- PL. LEGAL LINE
- PL. LEGAL E.O.W. & EASEMENT
- SM. SANITARY & MANHOLE
- LM. STORM & MANHOLE
- PL. STORM & DOUBLE CATCH-BASIN ON CE LEADS
- PL. CATCH-BASIN MANHOLE
- PL. COLLECT
- PL. DITCH & SWALE
- PL. PRE-VENTION & VALVE ASSEMBLY
- PL. INTERMEDIATE VALVE
- PL. BLOW-OFF ASSEMBLY
- PL. ASPHALT P
- PL. ASPHALT F
- PL. ROAD BRIDGE
- PL. BROADEN
- PL. TOP OF EDGE
- PL. TOP OF SLOPE
- PL. DITCH & SWALE
- PL. FENCE
- PL. OVERHEAD LINES
- PL. UNDERGROUND LINES
- PL. POWER POLES & MASTS
- PL. GAS MAIN

NO.	DATE (D/M/Y)	REVISION	BY

NOT FOR CONSTRUCTION



CONSULTANTS PROJECT No: 1913-01

DESIGNED: JES
 CHECKED: JES
 ENGINEER: JES
 DATE: 16/JAN/2024
 SCALES: AS SHOWN
 SCALES:

DEANNA STEWARD
 5689 E. CENTENNIAL ROAD
 MOBERLY LAKE, BC
 4 LOT SUBDIVISION
 SEWAGE SUITABILITY ASSESSMENT
 OVERALL SITE PLAN

DRAWING No. 002

ISSUED FOR REVIEW

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Planning Department
FW: DL 1889 Rezone Application

From: Steward <[REDACTED]>
Sent: Sunday, February 2, 2025 2:05 PM
To: Ashley Murphey <Ashley.Murphey@prrd.bc.ca>; Adam Morton <adam.morton@prrd.bc.ca>
Subject: DL 1889 Rezone Application

Hello Adam and Ashley

Re: DL 1889 Rezoning Application
24-006 ZN - Board Consideration

I am wanting to address a concern that was raised with regard to proposed floodplain areas within DL 1889.

You note that the present proposed location of Lots 1 & 2 septic systems may lie within floodplain areas as suggested by the recent PRRD Floodplain Identification and Flood Hazard Mapping.

Please note that the final locations and designs for the septic systems will comply with Northern Health Regulations. There were a multitude of percolation test holes drilled on the property with opportunity for several locations.

Please attach this note to the original proposal so that it may be considered at the PRRD Board Meeting Reading on February 20, 2025.

As well, if you could please acknowledge receipt of this email, that would be appreciated.

Thank you,

Deanna Steward
[REDACTED]